

Alon V McCormick

List of Publications by Year in descending order

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83
papers

2,158
citations

172457

29
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254184

43
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83
all docs

83
docs citations

83
times ranked

1861
citing authors

#	ARTICLE	IF	CITATIONS
1	Aero-Solâ™ Gel Synthesis of Nanoporous Iron-Oxide Particles: A Potential Oxidizer for Nanoenergetic Materials. <i>Chemistry of Materials</i> , 2004, 16, 1466-1471.	6.7	112
2	Performance of a Small-Scale Haber Process. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 3742-3750.	3.7	103
3	Thermochemistry of aqueous silicate solution precursors to ceramics. <i>AICHE Journal</i> , 1997, 43, 2773-2784.	3.6	89
4	Unidirectional and single-file diffusion in AlPO ₄ -5: molecular dynamics investigations. <i>Molecular Physics</i> , 1996, 87, 367-387.	1.7	75
5	Ammonia Synthesis at Reduced Pressure via Reactive Separation. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 8922-8932.	3.7	70
6	The effect of nanopore shape on the structure and isotherms of adsorbed fluids. <i>Adsorption</i> , 1996, 2, 9-21.	3.0	68
7	Better Absorbents for Ammonia Separation. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 6536-6546.	6.7	63
8	Solubility of sodium soaps in aqueous salt solutions. <i>Journal of Colloid and Interface Science</i> , 2005, 291, 543-549.	9.4	60
9	Superselectivity and solvation forces of a two component fluid adsorbed in slit micropores. <i>Journal of Chemical Physics</i> , 1993, 99, 9890-9898.	3.0	58
10	Modeling and Optimal Design of Absorbent Enhanced Ammonia Synthesis. <i>Processes</i> , 2018, 6, 91.	2.8	57
11	Differential Scanning Calorimetry and Cantilever Deflection Studies of Polymerization Kinetics and Stress in Ultraviolet Curing of Multifunctional (Meth)acrylate Coatings. <i>Macromolecules</i> , 2002, 35, 112-120.	4.8	55
12	In situ stress measurement apparatus for liquid applied coatings. <i>Review of Scientific Instruments</i> , 1997, 68, 4564-4568.	1.3	54
13	Sol-gel polycondensation kinetic modeling: Methylsiloxanes. <i>AICHE Journal</i> , 1998, 44, 1141-1156.	3.6	54
14	Openâ€system Monte Carlo simulations of Xe in NaA. <i>Journal of Chemical Physics</i> , 1993, 98, 8919-8928.	3.0	52
15	Diffusion and Percolation on Zeolite Sorption Lattices. <i>The Journal of Physical Chemistry</i> , 1996, 100, 967-973.	2.9	52
16	Converting Wind Energy to Ammonia at Lower Pressure. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 827-834.	6.7	49
17	Biofilm Formation by Hydrocarbon-Degrading Marine Bacteria and Its Effects on Oil Dispersion. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 14490-14499.	6.7	49
18	The role of dispersantsâ€™ dynamic interfacial tension in effective crude oil spill dispersion. <i>Marine Pollution Bulletin</i> , 2014, 84, 155-163.	5.0	47

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19	The effects of processing variables on stress development in ultraviolet-cured coatings. Journal of Applied Polymer Science, 1997, 66, 1267-1277.	2.6	41
20	Effect of Loading and Nanopore Shape on Binary Adsorption Selectivity. The Journal of Physical Chemistry, 1996, 100, 638-645.	2.9	40
21	Dispersion of oil into water using lecithin-Tween 80 blends: The role of spontaneous emulsification. Journal of Colloid and Interface Science, 2017, 487, 52-59.	9.4	40
22	Density Functional Theory Study on the Adsorption of H ₂ S and Other Claus Process Tail Gas Components on Copper- and Silver-Exchanged Y Zeolites. Journal of Physical Chemistry C, 2012, 116, 3561-3575.	3.1	37
23	Column absorption for reproducible cyclic separation in small scale ammonia synthesis. AIChE Journal, 2017, 63, 3058-3068.	3.6	37
24	Integrated Ammonia Synthesis and Separation. ACS Sustainable Chemistry and Engineering, 2019, 7, 18785-18792.	6.7	35
25	A study of stress development in aqueous gelatin coatings. Journal of Applied Polymer Science, 1999, 73, 553-561.	2.6	34
26	Efficient dispersion of crude oil by blends of food-grade surfactants: Toward greener oil-spill treatments. Marine Pollution Bulletin, 2015, 101, 92-97.	5.0	34
27	Rates of Ammonia Absorption and Release in Calcium Chloride. ACS Sustainable Chemistry and Engineering, 2018, 6, 11827-11835.	6.7	31
28	New lattice model for adsorption of small molecules in zeolite micropores. AIChE Journal, 1994, 40, 925-934.	3.6	30
29	Ammonia absorption at haber process conditions. AIChE Journal, 2012, 58, 3526-3532.	3.6	30
30	Nanoparticles Containing High Loads of Paclitaxel-Silicate Prodrugs: Formulation, Drug Release, and Anticancer Efficacy. Molecular Pharmaceutics, 2015, 12, 4329-4335.	4.6	30
31	Effect of lamp cycling on conversion and stress development in ultraviolet-cured acrylate coatings. Journal of Applied Polymer Science, 2002, 84, 2784-2793.	2.6	28
32	Optimizing the Conditions for Ammonia Production Using Absorption. ACS Sustainable Chemistry and Engineering, 2019, 7, 4019-4029.	6.7	28
33	Ammonia synthesis enhanced by magnesium chloride absorption. AIChE Journal, 2015, 61, 1364-1371.	3.6	24
34	Optimizing Ammonia Separation via Reactive Absorption for Sustainable Ammonia Synthesis. ACS Applied Energy Materials, 2020, 3, 2576-2584.	5.1	24
35	Trimethylethoxysilane Liquid-Phase Hydrolysis Equilibrium and Dimerization Kinetics: Catalyst, Nonideal Mixing, and the Condensation Route. Journal of Physical Chemistry A, 1999, 103, 4233-4241.	2.5	23
36	Mechanism of Micelle Birth and Death. Physical Review Letters, 2019, 123, 038003.	7.8	23

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37	²⁹ Si NMR study of base-catalyzed polymerization of dimethyldiethoxysilane. <i>Magnetic Resonance in Chemistry</i> , 1999, 37, S27-S37.	1.9	22
38	The effects of a dynamic lattice on methane self-diffusivity calculations in AlPO ₄ -5. <i>Journal of Chemical Physics</i> , 2000, 112, 3345-3350.	3.0	22
39	Unidirectional and single-file diffusion in AlPO ₄ -5: molecular dynamics investigations. <i>Molecular Physics</i> , 1996, 87, 367-388.	1.7	20
40	Control of Synthesis Conditions to Improve Zirconia Microspheres for Ultrafast Chromatography. <i>Journal of the American Ceramic Society</i> , 2001, 84, 1721-1727.	3.8	19
41	Design and Characterization of a PVLA-PEG-PVLA Thermosensitive and Biodegradable Hydrogel. <i>ACS Macro Letters</i> , 2017, 6, 1134-1139.	4.8	19
42	Synthesis and Characterization of Submicron-to-Micron Scale, Monodisperse, Spherical, and Nonporous Zirconia Particles. <i>Journal of the American Ceramic Society</i> , 2005, 88, 707-713.	3.8	18
43	Stress development and film formation in multiphase composite latexes. <i>Journal of Coatings Technology Research</i> , 2014, 11, 827-839.	2.5	18
44	Copolymerization kinetics of a model siloxane system. <i>Journal of Polymer Science Part A</i> , 1997, 35, 1293-1302.	2.3	17
45	Synthesis of Zirconia Colloids from Aqueous Salt Solutions. <i>Journal of the American Ceramic Society</i> , 1999, 82, 338-342.	3.8	15
46	Adsorption of Binary Mixtures in a Zeolite Micropore. <i>Molecular Simulation</i> , 1996, 17, 239-254.	2.0	14
47	Modulus- and Surface-Energy-Tunable Thiol-ene for UV Micromolding of Coatings. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 24976-24986.	8.0	14
48	Reaction Engineering of Cocondensing (Methyl)ethoxysilane Mixtures: Kinetic Characterization and Modeling. <i>Macromolecules</i> , 2000, 33, 7743-7750.	4.8	13
49	Depthwise Viscosity Gradients in UV-Cured Epoxy Coatings. <i>Macromolecular Materials and Engineering</i> , 2013, 298, 145-152.	3.6	13
50	Stress Development in Hard Particle Coatings in the Absence of Lateral Drying. <i>Journal of the American Ceramic Society</i> , 2015, 98, 2214-2222.	3.8	13
51	Transformation of Lipid Vesicles into Micelles by Adding Nonionic Surfactants: Elucidating the Structural Pathway and the Intermediate Structures. <i>Journal of Physical Chemistry B</i> , 2022, 126, 2208-2216.	2.6	13
52	Adsorption and energetics of xenon in mordenite: A Monte Carlo simulation study. <i>Journal of Chemical Physics</i> , 1995, 103, 3029-3037.	3.0	12
53	Binary fluids in planar nanopores: Adsorptive selectivity, heat capacity and self-diffusivity. <i>Adsorption</i> , 1996, 2, 33-40.	3.0	11
54	An Improved Oil Emulsion Synthesis Method for Large, Porous Zirconia Particles for Packed- or Fluidized-Bed Protein Chromatography. <i>Separation Science and Technology</i> , 1997, 32, 2547-2559.	2.5	10

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55	Diameter-dependent dispersion in cylindrical bead packs. <i>AIChE Journal</i> , 2008, 54, 2024-2028.	3.6	10
56	Simulation of diblock copolymer surfactants. I. Micelle free energies. <i>Physical Review E</i> , 2019, 100, 012602.	2.1	10
57	Simulation of diblock copolymer surfactants. II. Micelle kinetics. <i>Physical Review E</i> , 2019, 100, 012603.	2.1	10
58	Effects of aging time on V2O5 sol-gel coatings. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 3, 57-62.	2.4	9
59	Predicting adsorption in one-dimensional zeolite pores with the exact theory of one-dimensional hard rods. <i>Molecular Physics</i> , 1994, 83, 429-437.	1.7	9
60	Water-in-Oil Microstructures Formed by Marine Oil Dispersants in a Model Crude Oil. <i>Langmuir</i> , 2016, 32, 3954-3962.	3.5	9
61	Does the Solvent in a Dispersant Impact the Efficiency of Crude-Oil Dispersion?. <i>Langmuir</i> , 2019, 35, 16630-16639.	3.5	9
62	Almost Fooled Again: New Insights into Cesium Dodecyl Sulfate Micelle Structures. <i>Langmuir</i> , 2014, 30, 12743-12747.	3.5	8
63	The Effect of Alkali Metal Cations on The Structure of Dissolved Silicate Oligomers. <i>Materials Research Society Symposia Proceedings</i> , 1987, 111, 107.	0.1	7
64	Self-diffusion coefficients of sol-gel intermediates. <i>AIChE Journal</i> , 1994, 40, 1193-1202.	3.6	6
65	Desorption in Ammonia Manufacture from Stranded Wind Energy. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 15475-15483.	6.7	6
66	Sol-Gel Kinetics for the Preparation of Inorganic/Organic Siloxane Copolymers. <i>Materials Research Society Symposia Proceedings</i> , 1996, 435, 113.	0.1	5
67	Pulsed irradiation for high-throughput curing applications. <i>Progress in Organic Coatings</i> , 2017, 104, 104-109.	3.9	5
68	Ammonia Synthesis at Low Pressure. <i>Journal of Visualized Experiments</i> , 2017, , .	0.3	5
69	A Career in Catalysis: Alexis T. Bell. <i>ACS Catalysis</i> , 2017, 7, 8628-8640.	11.2	5
70	Simulation of diblock copolymer surfactants. III. Equilibrium interfacial adsorption. <i>Physical Review E</i> , 2020, 102, 022605.	2.1	5
71	Transparent aluminosilicate gels from single alkoxides: Current directions. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 2, 7-10.	2.4	3
72	Nonlinear dynamics in micellar surfactant solutions. I. Kinetics. <i>Physical Review E</i> , 2022, 105, 034602.	2.1	3

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73	A Dynamic Monte Carlo Simulation of Sorbate Mobility in Zeolites: The Effects of Molecular Crowding on Sorbate Mobility. Materials Research Society Symposia Proceedings, 1992, 290, 147.	0.1	2
74	Effect of pH on the Final Connectivity Distribution of the Silicon Atoms in the St ₂ SiO ₂ Particles. Journal of Sol-Gel Science and Technology, 2005, 33, 255-260.	2.4	2
75	Modeling the Depthwise Gradient in Curing and Skin Formation in Wrinkling Coatings. Industrial & Engineering Chemistry Research, 2007, 46, 3358-3365.	3.7	2
76	Roll-to-roll micromolding of UV curable coatings. Journal of Coatings Technology Research, 2021, 18, 627-639.	2.5	2
77	Using Microemulsion Phase Behavior as a Predictive Model for Lecithin-Tween 80 Marine Oil Dispersant Effectiveness. Langmuir, 2021, 37, 8115-8128.	3.5	2
78	Nonlinear dynamics in micellar surfactant solutions. II. Diffusion. Physical Review E, 2022, 105, 034603.	2.1	2
79	Catalytic Control of SiO ₂ Sol-Gel Kinetics - a Mechanistic Study of Bases. Materials Research Society Symposia Proceedings, 1990, 180, 263.	0.1	1
80	Model Reaction Systems to Produce Monodisperse Colloids. Materials Research Society Symposia Proceedings, 1998, 520, 69.	0.1	1
81	Krafft Temperature of Cesium Dodecylsulfate Solutions at High Concentration. Journal of Chemical & Engineering Data, 2017, 62, 1623-1627.	1.9	1
82	Computer Simulation of Xe adsorption in Zeolite Y. Materials Research Society Symposia Proceedings, 1996, 431, 147.	0.1	0
83	SYNTHESIS OF ZIRCONIA COLLOIDS FROM AQUEOUS SALT SOLUTIONS AND THEIR APPLICATIONS. , 2003, , .		0